Remarks

By the present amendment, Claims 1-15 remain pending. Independent claims 1, 6, and 7 have been amended; and dependent claims 2-5, and 8-11 have also been amended. Applicants respectfully submit that no new matter has been added by the foregoing amendments. Reconsideration of the application, as amended, is requested.

Claim Rejection Under 35 U.S.C. § 101

In the final Office Action, independent claims 1, 6 and 7 were rejected under 35 U.S.C. 101 because the claimed invention was allegedly directed to non-statutory subject-matter. As set forth above, the Attorney for the Applicants has amended independent claims 1, 6 and 7 to clarify the invention, and therefore, independent claims 1, 6 and 7 are in condition for allowance.

Specifically, the Office Action suggested that the claims be amended to recite an output such as storing a created item or presenting the results for output. The present amendments to claim 1 include the element, "e) if the repetition of step c) is terminated, outputting via a computer an indication of whether any sequence results exist." Independent claims 6 and 7 respectively include similar elements such as "e) means recorded on the electronic storage medium for outputting an indication of whether any sequence results exist, if the repetition of step c) is terminated" and "means for outputting an indication of whether any sequence results exist, if the repetition of step c) is terminated".

Moreover, the Office Action suggested that the use of a computer in claim 1 had not been indicated. The amendment to claim 1 now clarifies that the method is a "computer-implemented method of determining a set of large sequences from an electronic data base", and that various elements of the claim are performed "via a computer".

Furthermore, the Office Action suggested that claim 6 be amended to recite "a computer program product stored and implemented on a computer to determine...". The amendment to claim 6 now clarifies that the claimed invention includes, "A computer program product stored and implemented on a computer to determine a set of large sequences from an electronic data base...".

Support for the above amendments can be found in the Applicants' specification. For example, the specification states that, "The actions described above are repeated for each

Serial No. 10/673,040

candidate. If, ultimately, not a single large sequence was found the operation of the third stage of the method is terminated and the results are output via the interface." See page 15, lines 31-34. Further support in the Applicants' specification can be found at, for example, page 23, line 16 – page 24, line 18; and Figures 1 and 2.

In addition, corresponding amendments to dependent claims 2-5, and 8-11 have been made. Dependent claims 2-5 and 8-15 are allowable as a mater of law as depending from allowable independent claims notwithstanding their own independent recitation of patentable subject matter.

Serial No. 10/673,040

CONCLUSION

It is not believed that extensions of time or fees for addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 19-5029.

Respectfully submitted,

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